



# 2002 New Jersey Health Care Provider Tobacco Survey

## A Statewide Report



James E. McGreevey  
Governor



Clifton R. Lacy, M.D.  
Commissioner

## Acknowledgments

The New Jersey Comprehensive Tobacco Control Program (CTCP) is operated by the New Jersey Department of Health and Senior Services (DHSS) under the direction of Commissioner Clifton R. Lacy, M.D. The CTCP is administratively located within the Office of the State Epidemiologist. This report was prepared for DHSS by the University of Medicine and Dentistry of New Jersey-School of Public Health through funding from the Master Settlement Agreement.

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### *Suggested Citation*

Steinberg MB, Delnevo CD, Abatemarco D, Brown ME, Muthurajah S, Malka ES , Hrywna M. The 2002 New Jersey Health Care Provider Tobacco Survey: A Statewide Report for the New Jersey Department of Health and Senior Services. New Brunswick, NJ: University of Medicine and Dentistry of New Jersey-School of Public Health; February 2003.

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## **Executive Summary**

Tobacco continues to be the single most important preventable health crisis in this country. States have made strong efforts to reduce the impact of this public health problem. The New Jersey Department of Health and Senior Services (DHSS) funds a Comprehensive Tobacco Control Program (CTCP) to reduce the prevalence of tobacco use and its associated health damaging effects on the people of New Jersey.

Health care providers play a key role in the identification, assessment, and treatment of smokers. Therefore, any comprehensive tobacco intervention must involve providers and increase their role in tobacco dependence treatment. At the national level, clinical practice guidelines have been established to assist providers in treating tobacco dependence. In New Jersey, CTCP resources are also available for providers to help their patients quit smoking. However, until this report no data existed to assess the extent to which New Jersey health care providers are implementing tobacco treatment in their practices or providing referrals to CTCP services.

The New Jersey Health Care Provider Tobacco Survey (NJHCPTS) was designed to collect such data among health care providers treating adults, adolescents, and pregnant women in New Jersey. The purpose of this report is to:

- Present baseline measures of New Jersey health care providers' knowledge, attitudes, and practices regarding tobacco dependence treatment.
- Provide recommendations to the CTCP to improve tobacco dependence treatment among providers.

### **Provider awareness and adherence of guidelines**

According to the survey, 54.6% of providers reported hearing of the Public Health Service Guidelines for Treating Tobacco Dependence. However, only 5.2% reported having integrated them into their practices. These evidence-based guidelines call for clinicians to conduct basic intervention strategies for patients who smoke using the "5 A's".

- **ASK** about tobacco use from every patient at every visit
- **ADVISE** smokers to quit
- **ASSESS** readiness to quit
- **ASSIST** in the quit attempt
- **ARRANGE** follow up contact

The application of the "5 A's" recommendations was not universal. The majority of adult providers reported ASKING (82.7%) and ADVISING (78.6%), but fewer adult providers reported ASSESSING (59.9%), ASSISTING (38.7%), and ARRANGING (9.1%). Only 57.2%

and 68.3% of adolescent providers routinely ASK and ADVISE, with fewer adolescent providers ASSESSING (47.1%), ASSISTING (25.7%), and ARRANGING (2.0%).

### **Provider perceptions and knowledge of treatment**

Health care providers overwhelmingly believed (96.4%) tobacco treatment was part of their responsibility as a health care provider even though only 19.6% of providers reported any training in tobacco dependence treatment. However, nearly two-thirds of providers would welcome additional training in tobacco dependence treatment.

Of those providers treating adults, 67.0% felt confident in their ability to treat tobacco dependence with medications, as compared with 45.5% among providers treating adolescents and 34.1% of providers treating pregnant women. Tobacco dependence treatment strategies varied in their perceived effectiveness. Over three-quarters of providers felt that medications were effective and nearly three-quarters felt tobacco treatment programs (i.e. group treatment) were effective, while less than 25% of providers felt that telephone quit lines or internet sites were effective.

### **Barriers to treatment**

Although providers felt a responsibility to treat tobacco use, fewer than half of providers reported having a system in their practice to screen for smoking, to prompt counseling behaviors, and to offer community resources. Eighty-percent of providers believed that patient resistance to treatment and lack of patient interest were barriers to providing tobacco dependence treatment. Other barriers reported by providers included a lack of community resources (67.5%), the cost of programs (63.5%) and medications (62.7%), and the lack of training (52.1%).

### **Awareness of State resources**

One-third of providers (35.0%) were familiar with at least one of the State's Quit Services and 16.5% of providers had referred a patient to at least one of the State's Quit Services. Among providers who were aware of Quitline and Quitnet, 47.2% had referred patients to them.

The results support recommendations that health care providers are important partners in tobacco dependence treatment. Opportunities exist for CTCP activities to engage providers, and thus improve utilization of the State's Quit services. These activities can address improving clinical skills, dispelling misperceptions, and reducing perceived barriers to treatment. Outreach strategies need to be improved via direct marketing, training, and linkages to key individuals and organizations.

## **Introduction**

A primary goal of the New Jersey Department of Health and Senior Service's (DHSS) Comprehensive Tobacco Control Program (CTCP) is to reduce the prevalence of cigarette smoking. In 2001, 22.1% of New Jersey adults and 24.5% of high school youth were current smokers.<sup>1</sup> In addition to reducing initiation, a substantial increase in the rate of smoking cessation is necessary to reduce smoking prevalence. Helping smokers quit will lead to short-term reductions in tobacco-related morbidity and mortality.

Health care providers can play a key role in the identification, assessment, and treatment of smokers.<sup>2-3</sup> Physicians have contact with approximately 70% of all smokers each year, with the majority making four or more visits annually.<sup>4</sup> Studies have shown that physician-delivered smoking cessation interventions are well received and effective. Physician advice or counseling, combined with additional supports such as nicotine replacement and follow-up counseling sessions, have been shown to significantly increase quit rates over no or minimal contact.<sup>5</sup>

To assist providers, clinical practice guidelines for tobacco dependence treatment were developed in 1989 by the National Cancer Institute and the Agency for Health Care Policy and Research and updated in 2000 by the Public Health Service.<sup>6</sup> These evidence-based guidelines call for clinicians to conduct basic intervention strategies for patients who smoke. These are described as the "5 A's" (Ask, Advise, Assess, Assist, Arrange)

Despite these guidelines, the rates of intervention are still not adequate. The 2001 New Jersey Adult Tobacco Survey revealed that only two-thirds of adults were asked about smoking by their physician, and even fewer adults received cessation advice.<sup>7</sup> The 2001 New Jersey Youth Tobacco Survey showed that only 35.9% of high school students were asked about smoking by their physician.<sup>1</sup>

The CTCP is unique in providing a comprehensive array of low-cost treatment options:

- New Jersey Quitnet, developed by Boston University, is a free online resource designed to provide individually tailored cessation support.
- New Jersey Quitline, operated by the Mayo Foundation, is a free telephone-based service that provides one-on-one smoking cessation counseling.
- New Jersey Quitcenters are located throughout the state to offer individual and group counseling as well as nicotine replacement therapy at reduced costs.
- Not-On-Tobacco (N-O-T), implemented by the American Lung Association, is designed to help teens quit smoking by addressing their specific needs and helping them choose healthy lifestyle behaviors.

- Mom's Quit Connection, run by the Southern New Jersey Perinatal Cooperative, is designed to help pregnant women and new moms quit smoking through individual counseling, support group meetings, and educational programs.

Until now there were no representative data on the implementation of tobacco dependence treatment and referrals to NJ Quit services among the State's health care providers. Given that tobacco cessation is a primary goal of the CTCP, these data are greatly needed.

The University of Medicine and Dentistry of New Jersey (UMDNJ) – School of Public Health (SPH) developed the New Jersey Health Care Provider Tobacco Survey (NJHCPTS) to provide baseline measures to monitor the effect of the State's tobacco cessation activities. The 2002 NJHCPTS was completed by 1241 physicians and midwives between June and November 2002. It collected data from providers serving three distinct patient populations - adults, adolescents, and pregnant women. This report highlights current data on tobacco cessation knowledge, attitudes, and practices among New Jersey health care providers and provides recommendations to improve providers' tobacco dependence treatment.



## Results

### Clinical practices for tobacco dependence treatment

To monitor trends in clinical practices for tobacco dependence treatment, the U.S. Public Health Service's *Clinical Practice Guidelines for Tobacco Dependence Treatment* were considered.<sup>6</sup> The guidelines are intended to become part of standard care and recommend that clinicians treat patients using the "5 A's" (ASK, ADVISE, ASSESS, ASSIST, and ARRANGE). Overall, 54.6% ( $\pm 3.5$ ) of providers reported some awareness of the guideline. However, only 5.2% ( $\pm 1.8$ ) of providers reported implementing the guidelines into clinical practice (see Figure 1).

**Figure 1:** Awareness of *Clinical Practice Guidelines for Tobacco Dependence*

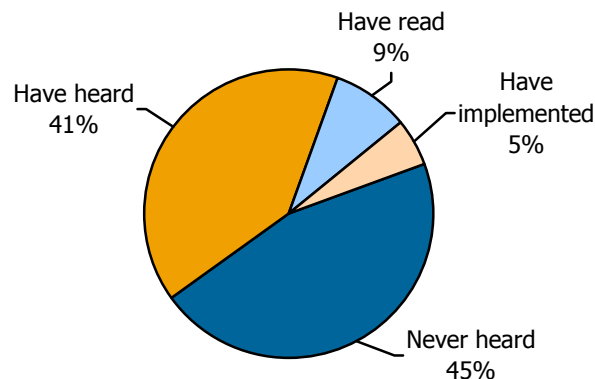


Figure 2 describes the rates of "always" implementing the 5 A's among health care providers by their patient population. Providing smokers with treatment for tobacco dependence begins with asking or systematically identifying tobacco users at every visit to their physician. Health care providers who serve adults and pregnant women reported high rates of routinely ASKING all patients about their smoking status. However, providers treating adolescents were significantly less likely ( $57.2 \pm 4.9\%$ ) to report routinely ASKING all patients about smoking.

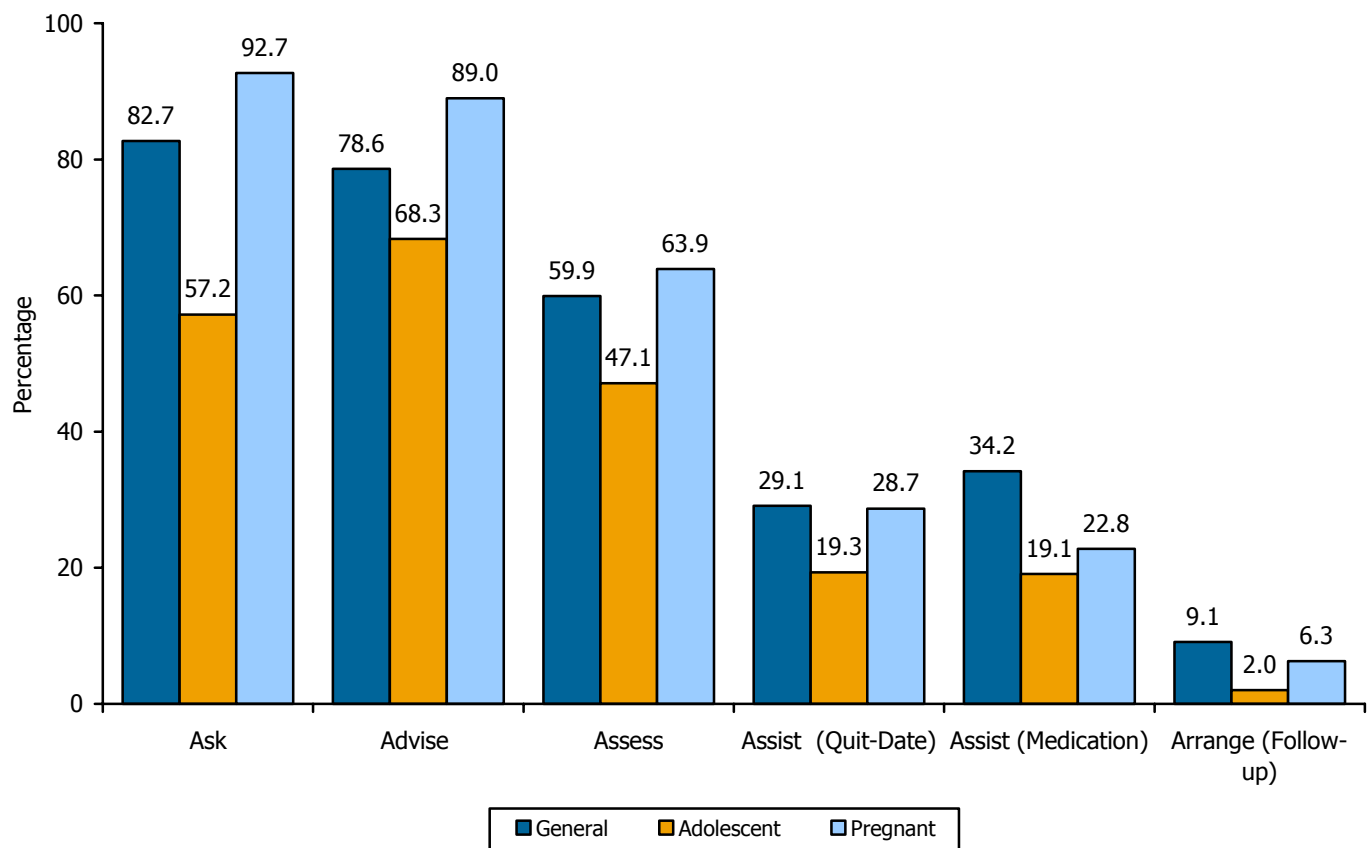
#### Special Populations: Identifying adolescent smokers

- 98.6% ( $\pm 1.2$ ) of providers treating adolescents reported identifying smokers by directly asking the adolescent patient.
- More than two-thirds ( $72.6 \pm 4.4\%$ ) reported identifying smoking status through smell or other physical signs. One out of three providers reported asking the adolescent's parent ( $42.4 \pm 4.9\%$ ) about his/her child's smoking status. Since providers indicated all methods used, it is unknown in what order they apply these screening tools.



More than two-thirds of all providers reported ADVISING all smokers to quit. Over half of all providers reported “always” ASSESSING the patient’s interest in quitting (i.e., stage of change); providers treating adolescent patients were significantly less likely to ASSESS interest in quitting. Providers less frequently ASSISTED with quitting by helping the patient set a quit date and/or discussing medication. Fewer than one out of three providers reported “always” discussing quit dates or medication. Lastly, providers rarely ARRANGED follow-up.

**Figure 2:** Adherence to clinical practice guidelines



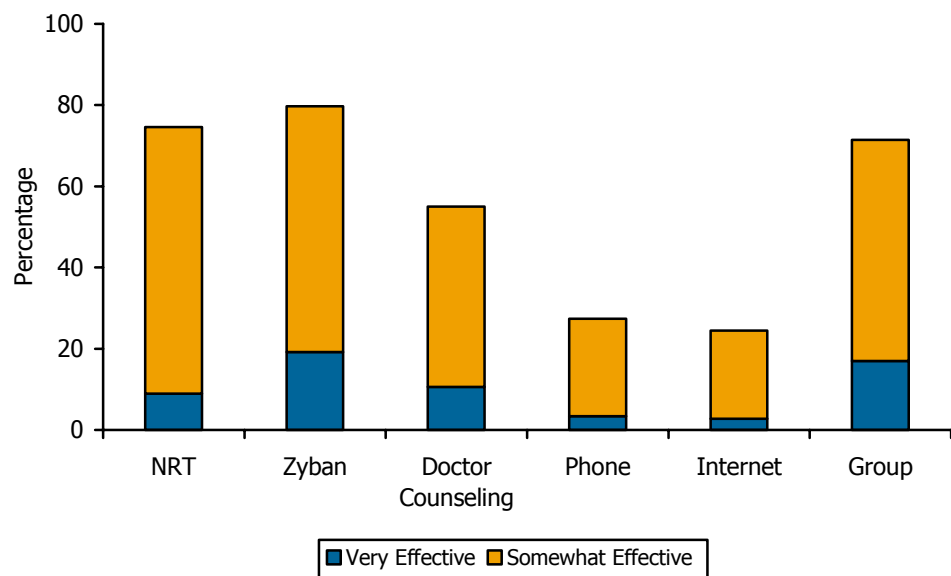
## Attitudes and perceptions towards tobacco dependence

Regardless of the population served, almost all providers ( $96.4 \pm 1.3\%$ ) agreed it was their responsibility to help smokers quit. There were differences noted among the provider groups with regards to self-efficacy, or confidence, in assessing and treating tobacco dependence. Providers who treat adults were more confident in assessing tobacco dependence ( $80.5 \pm 4.2\%$ ) compared to providers who treat adolescents ( $61.2 \pm 4.5\%$ ) or pregnant women ( $61.3 \pm 3.5\%$ ). Providers who treat adults were also more confident in treating with medication ( $67.0 \pm 4.9\%$ ) compared to  $45.5\%$  ( $\pm 4.2$ ) of adolescent providers and  $34.1\%$  ( $\pm 3.5$ ) of providers who treat pregnant women. Providers rated the perceived effectiveness of various techniques/strategies to help smokers quit (see Figure 3).

Treatment programs including group counseling were perceived by providers as being highly effective; almost two out of three providers believed treatment programs were somewhat or very effective. Nearly three-quarters of providers ( $74.6 \pm 3.1\%$ ) also reported nicotine replacement therapy (NRT) and Zyban<sup>®</sup> as somewhat or very effective.

Fewer providers felt that phone and internet-based counseling for cessation were effective, a trend that remained consistent across all types of providers.

**Figure 3:** Perceived effectiveness of treatment strategies



### Special Populations: Treating pregnant smokers

Two thirds of providers who treat pregnant women **would not** prescribe nicotine replacement therapy (NRT) to a patient smoking a pack per day who is *unable* to quit after serious attempts but who is *motivated* to quit with a pharmacological aid.

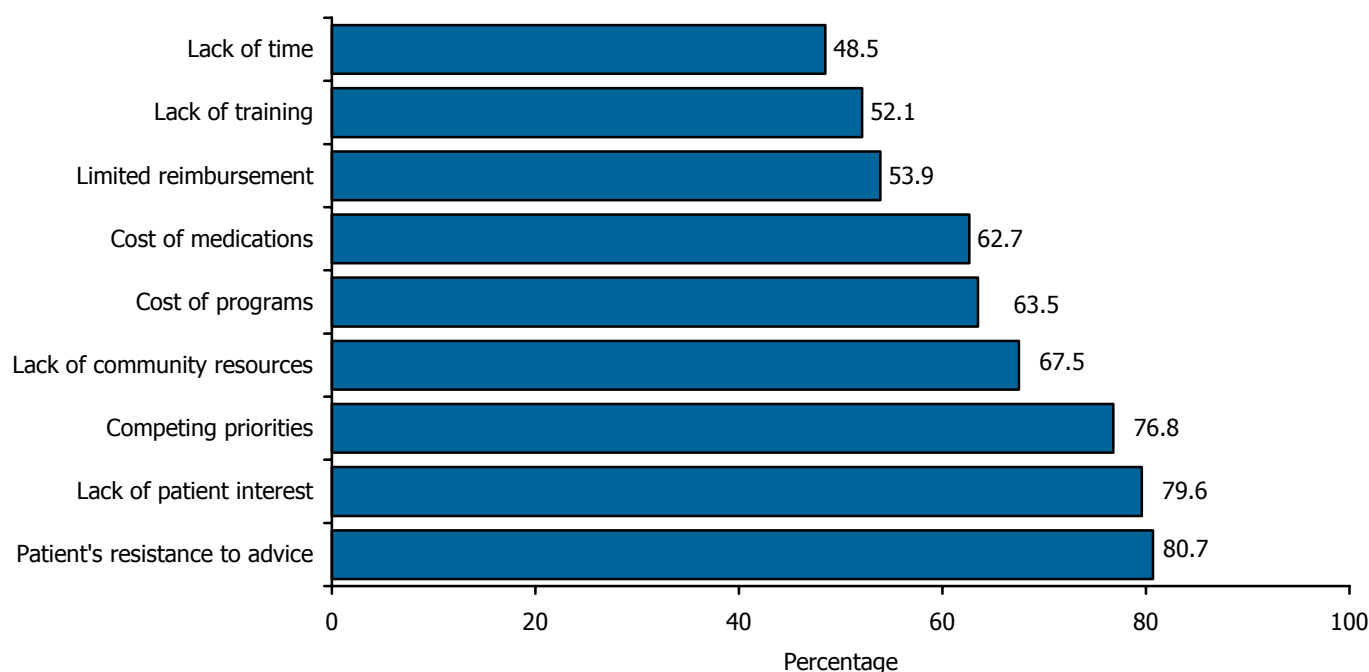
Why? Among those providers who reported they would not prescribe, reasons included:

- Being unsure whether the benefits of NRT outweigh the risks to their patients ( $58.0 \pm 4.4\%$ ).
- Fear of malpractice ( $60.3 \pm 4.2\%$ ).
- Belief that it is unethical to prescribe a known harmful substance (nicotine) during pregnancy ( $43.6 \pm 4.4\%$ ).

## Barriers to providing tobacco dependence treatment

Providers commented on perceived barriers toward providing tobacco dependence treatment (see Figure 4). Three barriers- lack of time ( $48.5 \pm 3.5\%$ ), limited reimbursement ( $53.9 \pm 3.6\%$ ) and competing priorities during the visit ( $76.8 \pm 3.0\%$ ) - are common barriers to all preventive services. These types of barriers are likely to be inherent to the clinical practice setting and therefore, more challenging to modify.

**Figure 4:** Barriers reported toward providing tobacco dependence treatment



Almost two-thirds of providers perceived the lack of cessation resources ( $67.5 \pm 3.3\%$ ), cost of medication ( $62.7 \pm 3.4\%$ ), and cost of cessation programs ( $63.5 \pm 3.4\%$ ) as barriers to smoking cessation. Surprisingly, providers overwhelmingly perceived that patients were resistant to cessation advice ( $80.7 \pm 2.9\%$ ) and lacked interest ( $79.6 \pm 3.0\%$ ). Providers' perceptions conflict with population-based data that indicate most smokers want to quit.<sup>8</sup> Lastly, over half of the providers indicated that their own lack of training in tobacco dependence was a barrier to providing treatment. Perceptions of barriers were fairly consistent across the three provider groups. However, lack of time was a notable barrier for adolescent providers ( $57.0 \pm 4.9\%$ ), and lack of training was a notable barrier for providers serving pregnant women ( $63.6 \pm 3.5\%$ ).

## Aids to providing tobacco dependence treatment

Guidelines suggest that tobacco use should be treated as a vital sign with prompts to screen and document tobacco use at every visit. As shown in Figure 5, some health care providers work in settings with clinical systems or procedures that facilitate tobacco dependence

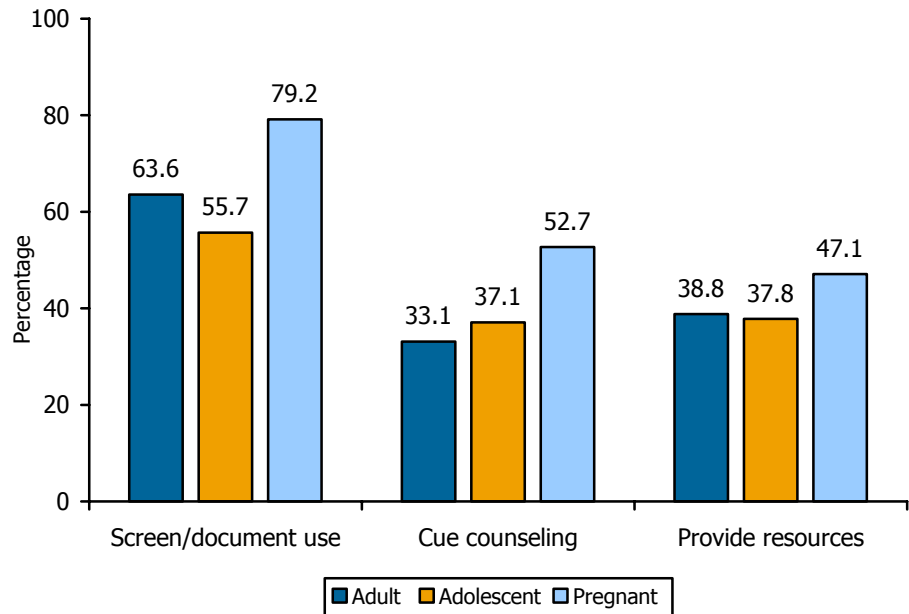
treatment in their practice. Overall, providers who serve pregnant women were more likely to have clinical systems or procedures in place to screen or track tobacco use. However, less than two-thirds of the other providers reported having a system to identify tobacco users in their clinical office and less than one-third reported having prompts for counseling. Lastly, less than half of all providers reported having a system in place to provide cessation materials and resources.

## Awareness of and referral to NJ Quit Services

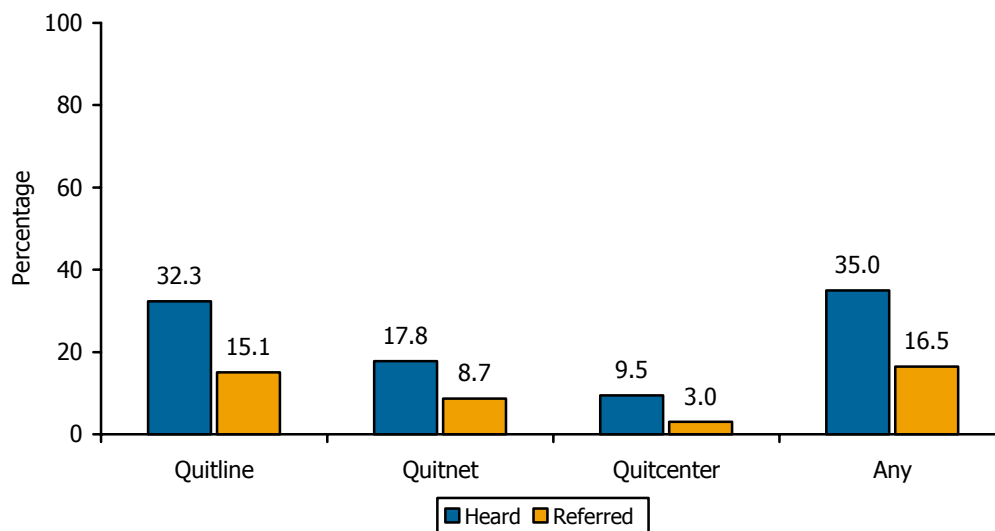
Providers were asked whether they were aware of New Jersey's three Quit Services and whether or not they referred patients to these services (see Figure 6). Providers were most familiar with NJ Quitline (32.3 ±3.2%) and least familiar with NJ Quitcenters (9.5 ±2.1%). Referral patterns were similar across all three

Quit Services; among those who were aware of a particular Quit Service, approximately half referred patients to the specific Quit Service. Awareness of Quit Services was highest among providers treating adults (38.8 ±5.0%), while providers treating pregnant women had the highest rate of referrals to Quit Services (20.3 ±3.9%).

**Figure 5:** Systems to aid tobacco dependence treatment



**Figure 6:** Awareness and referral of NJ Quit Services



## **Conclusions and Recommendations**

### **Encourage office settings to implement clinical systems and procedures that will consistently identify smokers and refer them to New Jersey Quit Services**

The results of this study clearly demonstrate that PHS Guidelines have had minimal impact on New Jersey health care providers. While roughly half of all providers have heard of the PHS Guidelines, less than 5% reported implementing the recommendations to their practices. If providers are not routinely ASKING tobacco status and ADVISING cessation, they will not be utilizing the CTCP's Quit Services. A simple way to improve the very low rates of ASSISTING quitting (30%) and ARRANGING follow-up (8%) is to increase referral to these evidence-based resources.

System-based approaches are one way to improve adherence to the PHS Guidelines for tobacco dependence treatment. Most clinical settings did not have systems in place to ask smoking status, cue providers to advise, and provide resources. Altering the practice behavior of individual providers is difficult<sup>9</sup> but recent studies have demonstrated that clinical systems and procedures can improve the delivery of treatment.<sup>10</sup>

The DHSS has taken preliminary steps to address this issue. A project to incorporate a tobacco treatment module into a practice-based electronic medical record system is currently underway in three pilot sites in New Jersey. Once the system has been established, it can be disseminated to other practices throughout the State. Other possible system-based interventions still need to be explored, but could include establishing tobacco use as part of the vital signs, as recommended by the Guidelines. Additionally, practices could improve their follow-up via a system to facilitate referral to Quit Services (e.g. Quitline stickers placed on the patient's encounter form at checkout from their visit).

### **Improve providers' overall awareness of and confidence in available cessation resources**

Providers view tobacco dependence treatment as an important part of health care delivery, but they lack the confidence or training to implement interventions. Only 20% of providers reported any training in tobacco dependence treatment and the majority of providers reported interest in obtaining additional training for tobacco treatment. The CTCP could link with professional organizations and health-related schools to support more education on tobacco dependence treatment. However, improving provider education and delivery of tobacco dependence treatment to patients is a long-term outcome that may take years to achieve. Providers can offer assistance to patients immediately by referring them to any one of the State's Quit Services, where trained cessation counselors can help them quit.

Only one-third of providers reported having ever heard of any of the Quit Services. Accordingly, there is a very low rate of utilization of these services. On a positive note, among those providers who were aware of the services, nearly half reported they had referred patients.

The CTCP must build awareness of Quit Services among providers in New Jersey. Cessation materials and resources should promote the effectiveness of NJ Quit Services. In this study, very few providers perceived telephone quit lines as effective. Data from other states have demonstrated the effectiveness of such strategies.<sup>11</sup> Additionally, preliminary data here in New Jersey show 6-month abstinence rates in the range of 27% for NJ Quitline, comparable to published data. Providers are more likely to refer their patients to services if evidence suggests these services are effective.

Activities are underway to educate providers in New Jersey. The DHSS has coordinated several medical grand rounds and other medical conferences throughout the State, and supported numerous publications on tobacco dependence treatment, and will continue to do so.

**Promotional materials targeting health care providers should address their perceived barriers to providing tobacco dependence treatment**

Over three-quarters of providers believe that smokers are not interested in quitting or are resistant to treatment. Previous studies have established that a majority of smokers want to quit<sup>8</sup> and many smokers report higher satisfaction with the visit when their physicians' advise them to quit.<sup>12</sup> Cessation materials and resources should dispel the commonly held myths by providers that smokers are unwilling to quit.

Many providers also identify cost as a significant barrier to treatment. Cost should no longer be perceived as barrier to tobacco cessation among patients and providers in New Jersey. New Jersey Quitline and Quitnet are free services, and the New Jersey Quitcenter services are available to residents on a sliding fee scale based on income.

As demonstrated by the high rates of referral among providers who were *aware*, providers are an important source of referral for the State's Quit Services. Providers need to become more informed via direct marketing and educational activities. Direct marketing strategies need to include more evidence-based information about the State's Quit services, such as abstinence rates for each of the services.

The DHSS has been working to increase providers' awareness of Quit Services through direct mail campaigns that have provided educational materials to more than 30,000 New Jersey physicians, dentists, pharmacists and other healthcare professionals. However, the CTCP

designed the materials so that providers can post the information in their waiting rooms. Materials are more likely to be effective in increasing utilization of Quit Services if they target providers and increase referrals. Studies show that smokers are more likely to follow the advice of their provider to seek treatment for their tobacco dependence.

Specialized promotional materials should be sent to providers serving adolescents and pregnant women. These populations are particularly vulnerable to the effects of tobacco, and the providers caring for them report low rates of confidence and expertise. These materials should target the specific issues surrounding tobacco use most applicable to these groups.



## **Technical Notes**

### **Instrument**

Health care providers were surveyed using the 2002 New Jersey Health Care Provider Tobacco Survey (NJHCPTS) instrument. The self-administered survey instrument was designed to meet specific needs of the CTCP. The NJHCPTS addressed seven content areas: tobacco dependence treatment practices, barriers to treatment, attitudes towards cessation, perceived effectiveness of treatment, self-efficacy, awareness of clinical guidelines, and awareness and referral to CTCP's Quit services.

### **Sample**

The NJHCPTS utilized a stratified random sample design. Since the focus of the survey was on various patient populations, rather than provider specialty, stratification was used to obtain a sufficient number of providers who serve three sub-populations: adolescents, adults, and pregnant women. The providers for each sub-population included: for adults- internists, general practitioners, and family physicians; for adolescents-family physicians and pediatricians; for pregnant women- obstetricians/gynecologists, and certified nurse-midwives. Since family physicians serve both the adult and adolescent populations this group was randomly assigned to either the adult or adolescent strata. The sampling frame for physicians in New Jersey was obtained the American Medical Association's (AMA) master list of licensed. This AMA master list is not limited to AMA members and is acknowledged to be the most complete repository of physicians' names, addresses, and specialties. Seven hundred physicians were sample from each sub-population for a total of 2100 physicians. All 270 certified nurse-midwives in New Jersey, as identified by the American College of Nurse-Midwives New Jersey Chapter, were sampled.

Out of the 2,100 primary care specialists and 270 certified nurse-midwives sampled, 1241 providers participated in the survey. Additionally, 500 providers were identified as ineligible to participate for various reasons (e.g., retired, no direct patient care, revoked license or relocation). An overall response rate of 66.4% among eligible health care providers was achieved. Response rates varied by population subgroup as follows, providers who treat adults (60.3%), providers who treat adolescents (67.4%) and providers who treat pregnant women (70.1%). The data were weighted to adjust for non response and the varying probabilities of selection, including those resulting from the over sampling, providing results representative of New Jersey primary care provider population.

### **Analysis**

SUDAAN statistical software, which corrects for the complex sample design, was used to generate 95% confidence intervals. Differences between estimates are considered statistically significant at the  $p = 0.05$  level if the 95% confidence intervals do not overlap.<sup>a</sup>

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## **Glossary**

**CTCP:** Comprehensive Tobacco Control Program, launched in New Jersey in 2000, was created using MSA funds to help stop young people from smoking and help current smokers quit.

**DHSS:** Department of Health and Senior Services, State of New Jersey.

**NJ Quitnet:** The New Jersey Quitnet ([www.njquitnet.org](http://www.njquitnet.org)) is a free online resource for smokers. The website offers peer support groups and trained counselors, 24 hours a day, as well as a quitting calendar, quitting tools and strategies, and a directory of local treatment options.

**NJ Quitline:** The New Jersey Quitline (1-866-NJSTOPS) is a toll-free telephone based service for smokers that offers one-on-one counseling in 26 languages.

**NJ Quitcenters:** The New Jersey Quitcenters offer smokers face-to-face counseling in a clinic setting. The Quitcenters offer individual and group therapy as well as reduced-cost nicotine replacement therapy.

**NJATS:** The New Jersey Adult Tobacco Survey is a population-based survey designed to examine the tobacco behavior, knowledge, and attitudes of New Jersey adults. The survey was conducted in 2000 and 2001.

**NJYTS:** The New Jersey Youth Tobacco Survey is a component of CDC's Youth Tobacco Surveillance and Evaluation System and monitors tobacco use behavior among middle and high school students. The baseline survey was conducted in 1999 and is repeated every other year.

**N-O-T:** Not-On-Tobacco is a quitting program designed specifically for teens developed by the American Lung Association, in collaboration with West Virginia University.

**UMDNJ:** The University of Medicine & Dentistry of New Jersey is the state's university of the health sciences and includes eight schools.

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New Jersey Department  
of Health and Senior Services